

Figure 1A

No.	Kinase-Subclass	Family	Sub	Protein	αD sequence									
1	Serine/Threonine	RAF		c-Raf	TQWCEGSSLYKHLHVQETK F									
2	Serine/Threonine	RAF		Araf	TQWCEGSSLYHHLHVADTR F									
3	Serine/Threonine	RAF		Braf	TQWCEGSSLYHHLHIIETKF									
4	Serine/Threonine	CAPK	-	cAPKa	MEYVPGGEMFSHLRRIGRF									
4	Serine/Threonine	CAPK		cAPKb	MEYVPGGEMFSHLRRIGRF									
5	Serine/Threonine	CAPK		cAPKg	MEYVPGGEMFSRLQRVGRF									
6	Serine/Threonine	PKC		PKCa	MEYVNGGDLMYHIQQVGK F									
7	Serine/Threonine	PKC		PKCb	MEYVNGGDLMYHIQQVGR F									
8	Serine/Threonine	PKC		PKCg	MEYVTGGDLMYHIQQLGKF									
9	Serine/Threonine	PKC		PKCd	MEFLNGGDLMFHIQDKGRF									
10	Serine/Threonine	PKC		PKCe	MEYVNGGDLMFQIQRSRKF									
11	Serine/Threonine	PKC		PKCet	MEFVNGGDLMFHIQKSRRF									
12	Serine/Threonine	PKC		PKCth	MEYLNGGDLMYHIQSCHKF									

Figure 1B

Sering/Thronning	AL+/DVD	Alet1/Page	MEYANGGELFFHLSRERVF
Serme/Theonme	ARVEND	ARII/Raca	WE I ANGGELFF ALSRER V F
Serine/Threonine	Akt/PKB	Akt2/Racb	MEYANGGELFFHLSRERVF
Serine/Threonine	GSK3	GSK3a	LEYVPETVYRVARHFTKAK
			LII
Serine/Threonine	GSK3	GSK3b	LDYVPETVYRVARHYSRAK QTL
Serine/Threonine	СКП	CK IIa	FEHVNNTDFKQLYQTL
Serine/Threonine	CK II	CK IIa'	FEYINNTDFKQLYQIL
Serine/Threonine	bARK1,2	bARK1	LDLMNGGDLHYHLSQHGV F
Serine/Threonine	bARK1,2	bARK2	LDLMNGGDLHYHLSQHGV F
Serine/Threonine	GRK1	GRK1	MTIMNGGDIRYHIYNVDED NPGF
Serine/Threonine	GRK4	GRK4	LTIMNGGDLKFHIYNLGNPG F
Serine/Threonine	GRK5	GRK5	LTIMNGGDLKFHIYNMGNP GF
Serine/Threonine	GRK6	GRK6	LTLMNGGDLKFHIYHMGQA GF
	Serine/Threonine Serine/Threonine Serine/Threonine Serine/Threonine Serine/Threonine Serine/Threonine Serine/Threonine	Serine/Threonine GSK3 Serine/Threonine GSK3 Serine/Threonine GSK3 Serine/Threonine CK II Serine/Threonine CK II Serine/Threonine bARK1,2 Serine/Threonine bARK1,2 Serine/Threonine GRK1 Serine/Threonine GRK4	Serine/Threonine Akt/PKB Akt2/Racb Serine/Threonine GSK3 GSK3a Serine/Threonine GSK3 GSK3b Serine/Threonine CK II CK IIa Serine/Threonine CK II CK IIa' Serine/Threonine bARK1,2 bARK1 Serine/Threonine bARK1,2 GRK1 Serine/Threonine GRK1 GRK1 Serine/Threonine GRK4 GRK4

Figure 1C

23	Serine/Threonine	CaMK	CaMK I	MQLVSGGELFDRIVEKGGY
			·	
24	Serine/Threonine	CaMK	CaMK IIa	FDLVTGGELFEDIVAREYY
				. 189
24	Serine/Threonine	CaMK	CaMK IIb	FDLVTGGELFEDIVAREYY
	Serine/Threonine	CaMK -	CaMK-IIg	FDLVTGGELFEDIVAREYY
24 5	Serine/Threonine	CaMK	CaMK IId	FDLVTGGELFEDIVAREYY
1 25	Serine/Threonine	POLO	Plk	LELCRRSLLELHKRRKAL
26	Serine/Threonine	POLO	Plx1	LELCRRSLLELHKRRKAV
27	Serine/Threonine	POLO	polo	LELCKKRSMMELHKRRKSI
28	Serine/Threonine	POLO	SNK	LEYCSRRSMAHILKARKVL
29	Serine/Threonine	POLO	CDC5	LEICPNGSLMELLKRRKVL
30	Serine/Threonine	POLO	Sak	LEMCHNGEMNRYLKNRVK PF
31	Serine/Threonine	POLO	Prk	LELCSRKSLAHIWKARHTL

Figure 1D

10.4	Ta		•	
31	Serine/Threonine	POLO	Fnk	LELCSRKSLAHIWKARHTL
32	Serine/Threonine	POLO	Plo1	LELCEHKSLMELLRKRKQL
33	Serine/Threonine	MARK/p 78	MARK1	MEYASGGEVFDYLVAHGR M
33	Serine/Threonine	MARK/p 78	MARK2	MEYASGGEVFDYLVAHGR M
34	Serine/Threonine	MARK/p 78	P78	MEYASGGKVFDYLVAHGR M
35	Serine/Threonine	CDK	CDK2	FEFLHQDLKKFMDASALTGI
36	Serine/Threonine	CDK	CDK4	FEHVDQDLRTYLDKAPPPG L
37	Serine/Threonine	CDK	CDK6	FEHVDQDLTTYLDKVPEPG V
38	Tyrosine	SRC	c-Src	TEYMSKGSLLDFLKGETGK YL
39	Tyrosine	SRC	c-Yes	TEFMSKGSLLDFLKEGDGK YL
40	Tyrosine	SRC	Fyn	TEYMNKGSLLDFLKDGEGR AL
41	Tyrosine	SRC	c-Fgr	TEFMCHGSLLDFLKNPEGQ DL
L		<u> </u>		· · · · · · · · · · · · · · · · · · ·

Figure 1E

42	Tyrosine	LYN/HC		Lyn	TEYMAKGSLLDFLKSDEGG
		K			KV
43	Tyrosine	LYN/HC K	-	Hck	TEFMAKGSLLDFLKSDEGS KQ
44	Tyrosine	LCK		Lck	TEYMENGSLVDFLKTPSGIK L
45	Tyrosine	-CSK		Csk	TEYMAKGSLVDYLRSRGRS VL
46	Tyrosine	CSK		Matk	MEHVSKGNLVNFLRTRGRA LV
47	Tyrosine	FAK		Fak	MELCTLGELRSFLQVRKYSL
48	Tyrosine	ABL		c-Abl	TEFMTYGNLLDYLRECNRQ EV
49	Tyrosine	ENDOTH ELIAL	Tie/Tek	Tie	IEYAPYGNLLDFLRKSRVLE TDPAFAREHGTASTL
50	Tyrosine	ENDOTH ELIAL	Tie/Tek	Tek	IEYAPHGNLLDFLRKSRVLE TDPAFAIANSTASTL
51	Tyrosine	ENDOTH ELIAL	FGFR	Flg	VEYASKGNLREYLQARRPP GLEYCYNPSHNPEEQL
52	Tyrosine	ENDOTH ELIAL	FGFR	Bek	VEYASKGNLREYLRARRPP GMEYSYDINRVPEEQM
53	Tyrosine	ENDOTH ELIAL	FGFR	FGFR-3	VEYAAKGNLREFLRARRPP GLDYSFDTCKPPEEQL

Figure 1F

54	Tyrosine	ENDOTH	FGFR	FGFR-4	VECAAKGNLREFLRARRPP
		ELIAL			GPDLSPDGPRSSEGPL
55	Tyrosine	ENDOTH	PDGFR	PDGFR-a	TEYCFYGDLVNYLHKNRDS
		ELIAL			FLSHHPEKPKKELDIFGLNP A
56	Tyrosine	ENDOTH ELIAL	PDGFR	PDGFR-b	TEYCRYGDLVDYLHRNKHT
		ELIAL			FLQHHSDKRRPPSAELYSNA L
57	Tyrosine	ENDOTH.	Flt/Flk	Flt1	VEYCKYGNLSNYLKSKRDL
58		ELIAL.			FFLNKDAALHMEPKKEKME PG
58	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flt4	VEFCKYGNLSNFLRAKRDA FSPCAEKSPEQRGRFRAMV
					EL EL
59	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flk1	VEFSKFGNLSTYLRGKRNEF
		LEIRE			VPYKSKGARFRQGKDYVGE L
60	Tyrosine	HGFR		c-Met	LPYMKHGDLRNFIRNETHN P
					r
61	Tyrosine	HGFR		c-Sea	LPYMRHGDLRHFIRAQERSP
				·	
62	Tyrosine	HGFR		Ron	LPYMCHGDLLQFIRSPQRNP
			•		
63	Tyrosine	EGFR		EGFR	TQLMPFGCLLDYVREHKDN
64	Tyrosine	EGFR		ErbB2	TQLMPYGCLLDHVRENRGR
					L
65	Tyrosine	EGFR	· · · · · · · · · · · · · · · · · · ·	ErbB3	TQYLPLGSLLDHVRQHRGA
					L

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Figure 1G

66	Tyrosine	EGFR	ErbB4	TQLMPHGCLLEYVHEHKDN
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67	Tyrosine	RET	Ret	VEYAKYGSLRGFLRESRKV GPGYLGSGGSRNSSSLDHPD ERAL
68	Tyrosine	TRK- NGFR	Trk - NGFR	FEYMRHGDLNRFLRSHGPD AKLLAGGEDVAPGPL
<u>69</u>	Tyrosine	TRK- NGFR	TrkB	FEYMKHGDLNKFLRAHGPD AVLMAEGNPPTEL
70	Tyrosine	TRK- NGFR	TrkC	FEYMKHGDLNKFLRAHGPD AMILVDGQPRQAKGEL
71	Tyrosine	SYK/ZA P70	Syk	MEMAELGPLNKYLQQNRH V
72	Tyrosine	SYK/ZA P70	Zap70	MEMAGGGPLHKFLVGKRE EI
73	Tyrosine	TYK/JA K	Jak1	MEFLPSGSLKEYLPKNKNKI
74	Tyrosine	TYK/JA K	Jak2	MEYLPYGSLRDYLQKHKER I
75	Tyrosine	TYK/JA K	Jak3	MEYLPSGCLRDFLQRHRAR L
76	Tyrosine	TYK/JA K	Tyk2	MEYVPLGSLRDYLPRHSI
77	Serine/Threonine	IAK	Iak1	LEYAPLGTVYRELQKLSKF
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Figure 1H

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78	Serine/Threonine	СНК		Chk1	LEYCSGGELFDRIEPDIGM
79	Serine/Threonine	IKK		IKK-1	MEYCSGGDLRKLLNKPENC CGL
80	Serine/Threonine	IKK		IKK-2	MEYCQGGDLRKYLNQFEN CCGL
81	Serine/Threonine	DAPK		DAPK	LELVAGGELFDFLAEKESL
82	Tyrosine	IRK.		IRK	MELMAHGDLKSYLRSLRPE AENNPGRPPPTL
83	Serine/Threonine	Activin/T GFbR	TGFbR	TGFbRII	TAFHAKGNLQEYLTRHVI
84	Serine/Threonine	Activin/T GFbR	ACTR	ACTRIIA	TAFHEKGSLSDFLKANVV
85	Serine/Threonine	Activin/T GFbR	ACTR	ACTRIIB	TAFHDKGSLTDYLKGNII
86	Serine/Threonine	Activin/T GFbR	ALK	ALK1	THYHEHGSLYDFLQRQTL
87	Serine/Threonine	Activin/T GFbR	ALK	ALK2	THYHEMGSLYDYLQLTTL
88	Serine/Threonine	Activin/T GFbR	ALK	ALK3	TDYHENGSLYDFEKCATL
89	Serine/Threonine	Activin/T GFbR	ALK	ALK4	SDYHEHGSLFDYLNRYTV

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Figure 1I

89	Serine/Threonine	Activin/T GFbR	ALK	ALK5	SDYHEHGSLFDYLNRYTV
90	Serine/Threonine	Activin/T GFbR	ALK	ALK6	TDYHENGSLYDYLKSTTL
91	Tyrosine	DDR		DDR1	TDYMENGDLNQFLSAHQL
92	Tyrosine	DDR-		ĐĐR2	TEYMENGDLNQFLSRHEP
93	Serine/Threonine	ILK		ILK	THWMPYGSLYNVLHEGTNF VV
94	Tyrosine	MAPK		JNK	MELMDANLCQVIQMEL

Figure 2A

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Protein Kinase
        TQWCEGSSLYKHLHIETKF
c-Raf
        SNFSDATTIFH
                           Ι
                              V D S R W
 Araf
                    MWR
                           M . M *
                                     Y
Braf
                     V
                           V
                              L
       MEYVPGGEMFSHLRRIGRF
 cAPKa
        IQFLNAADLMFRIQHVRKW
 cAPKb
                   * I W Y Q M S Q E H V Y
 cAPKg
        LDWAT
        V N
                     V Y W Ř V K Ď L K I
             IS
                      ITN
                             NKKAL
            MQ
                             TSS
                      L
             G
                      V
                              N C
                              E-M
                              TD
R
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PKCa
        MEYVNGGDLMFHIQQVGKF
        IDFLTAAEIIYQLNDLRRW
 PKCb
 PKCg
        L * W I Q
                   * MLWNM
                              RKH
                              KSK
             M \hat{S}
                     vv
                           V
 PKCd
                              SCA
PKCe
PKCet
                              NI
PKCth
                              EM
                               TR
                                T
 Akt1/Raca MEYANGGELFFHLSRERVF
 Akt2/Racb I Q F V Q A A D I W W
                           ITHDKIW
                           M
        LDWI
                   * M Y Y
                              K *
                                   LY
 DmRAC
        V N
                           V
             L
                     V
                                   M
             M
             G
        LEYVPETVYRVARHYTKAKQII
 GSK3a
                DSIHKIIKQFSRTNLTL
        IDFI
 GSK3b
                             NWA
                   LF
                        LV
                                   LRNRM
 Sgg/zw3
        M * W L
                                N
                                    SOILV
 ASK-a
             M
                   M W
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                                    Ι
                                       MM
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                                   M
                                        S
                                    V
                                    G
                                        K
        FEHVNNTDFKQLYQTL
 CK IIa
        WDYIQQSEWRNIFNII
 СК Па'
                          M\,W
        Y * F L
                    * Y
                               S M
                          V
                               M V
           WM
                               V
                               L
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Figure 2B

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bARK2 GRK1	LDLMNGGDLHYHLSQHGVFNPGF MTIIQAAEIRF IYNVDEDGFAW IEML *MKW MTHLENPQW Y VSVV V VF MAQAAY * UI*IW LY ME DG **	7.
Calar IIa	MQLVSGGELFDRIVEKGGY FDIITAADIWEDLIAREYF WNML *MY*KMLD DFW YEVM V EVMG AW II* * * * A L V	
Plk Plx1 Polo SNK CDC5 Sak Prk Fnk Plo1	LELCRRRSLLELHKRRKALF IDISKKGEMMAILRA HSVW M*Y SNKDINRYW N VVIY V M PHATVAHMI K RKP V HQ * IDVM Q ITM F E VKFV G LQ W T QGWF MT D G*Y I * L M R N G	
MARK1	MEYASGGEVFDYLVAHGRM LDFGTAAKIWEFIIG AKI I*W DLY*WML L V RM VM V	
CDK2 CDK4 CDK6	FEFLHQDLKKFMDAVALTGI WDHVDNEIRTYLEKSPPPAL Y*WIE *MTRWI*RAGES V YM* VSS V GI I M L M M V T D	

Figure 2C

```
c-Src
        TEFMSKGSLLDFLKGETGKYL
 c-Yes
        MDYVNHANIVNYIREGSRRAV
        S * H I C N
                                DPDKQDQ
 Fyn
                    TMIEWM
           WLAR
                    QVMQ
 c-Fgr
        Ι
                             V
                                NDEAGKI
               E Q
 Lyn
        \mathbf{L}
                                SRG
                                       SVM
        V
                                TKA
               T
 Hck
                                       ILN
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D
 Lck
                                Q A
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 Csk
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                                       NW
               G
 Matk
                                       TE
                                       L R
                                       M I
                                       VM
                                         G
Fak
        MELCTLGELRSFLQVRKYSL
        IDISSIADIKTWINIKRFTI
                    * M
                           \mathbf{Y}\mathbf{M}
        L * M
                 M
                                L
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W
                 V
                                         V
                             V
                                M
Ü
<sup>∏</sup>c-Abl
        TEFMTYGNLLDYLRECNRQEV
į.
        SDWISFAQIIEFIKDSQKNDI
fu
                      \hat{M}\hat{M} = WM
           ΥL
                 W
                                          L
Ξ÷
             V
                      \mathbf{v} \mathbf{v}
                                          M
Tie
        I E Y A P Y G N L L D F L R K S R V L E T D P A F A R E H G T
Tek
        TDFCRHADIVNYIHRNKHTFLQHHSDIANSP
                                     DSDFSNKPEKRRPE
PDGFR-b
        V * W S F F
                    QMSTWMKSK
             T K W
                    EVIE
PDGFR-a
        L
                             V
                                A T
                                     NAWSLCRDKAPKKR
                       M Q
T S
                                G Q
T R
             G W
                    *
Flt1
        M
                                     IEYVPYGERSLEMS
                                     L I *
 Flt4
        S
               Y
                                          ΙEQ
                                                 WGGDQQD
                                     MM
 Flk1
                                          MNF
                                                 Y * L K D F K
                                          WTW
                                                 Т
                                                    M I * T
                                     EV
                                     Q D
                                          YIS
                                                     VM
                                                          R
                                       G
                                            M
                                                     TV
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                                                          A
 Tie
        STLYSNAL
        AEFGLEPA
 PDGFR-b DIEKMVEG
 PDGFR-a KKRAVGDI
Flt1 RFDFTQGM
        GSIWID*V
 Flt4
 Flk1
        TDMR
                 I
        ELV
                 L
          MW
                 M
          V Y
                 Α
          RK
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W * Y

Figure 2D

Flg Bek FGFR-3 FGFR-4	V I L M	D *	C	G	S A T G	K R	Α	Q	L I M V	Ķ	D	F	L I M V	R N	A G	R Ķ	R K	P	P	G A	M	D *	L	S T	F P	D Q E *	I T G L M V S	N C P T	H R K	V P S Q I L M	S
Flg Bek FGFR-3 FGFR-4	E G D A	P N	M																					-			Α	•		T	
Ec-Met Ec-Sea ERon D H	L I M V		F	I	R			E	I M	L	H Q	W	I L M V	K	A S Q T		E Q S D	R	S	P											
EGFR ErbB2 ErbB3 ErbB4	T S	Q	Y I	L I V		FYLHWIMV	A	S	I M	I M	E *	H F	V I L M	H	Q	N	R	G E A	N R A Q K G	L M V											
Ret	Ι	D *	F	G	K R	Y F W	Α	S T	L I M V	K	G A	W	L I M V	K	E D *	S T	R K	K R	V I L M	A	P		F		A						N Q
Ret		S T		E	H	P			R K																						

Figure 2E

Syk Zap70	M I L V	D		G	G D A	G				Η	R	F W	I M V		G N	K Q	K	E D	V E I L M D	L M					-					
Jak1 Jak2 Jak3 Tyk2	I.	D	Ý	L I M V			A	\mathbf{C}			D	F		Q		Н	R S	E	Ř		٠						-			
de l'akl		D		G			Α	S	I	F W	K	D		N	R		T		F W Y											
Chk1	I	D *		CS				D		W	E			D *	P	E	I L M V	Α												
IKK-1 IKK-2	I.	D *	Y F W	CS	S Q T N	A	G A	E	L I M V	K	R	Y I	I M V	Q	Q R	P F W Y	D *	N Q	CS	C S	G A	L I M V								
DAPK	I M	D *	I M	V I L M	G			D	Ι	W	Ε	W Y		G																
IRK	Ι	D *	I M	I [L	G	Н	G A	Ε	L I M V	R	S	F	I I V V	K	S T	L I M V	K	P	E D *	G	E D *	N Q	N Q	P		R K		P	T S	L I M V
TGFbRII ACTRIIA ACTRIIB				7	A E D G	R	G A	S Q	I	S	D	F	I M	K	A G	NQ	I L	V	,								,			



Figure 2F

ALK1	TH	ΙY	H	E	Н	G	S	L	\mathbf{Y}	\mathbf{D}	F	L	Q	R	Q	T	L
ALK2	SI				M												
ALK3	E	\mathbf{w}		*	N			M	W	*	W	\mathbf{M}	N	C	Α		I
ALK4	4	ķ			I	•		V				\mathbf{v}	R	S	Y		M
ALK5					L									K	N		
ALK6					V									Ι	S		
					Q									M	F		-
	•													V	W		
														T	G		

Trk-NGFR F E Y M R H G D L N R F L R S H G P D A K L L A G G E D V A P WDFIK AEIQKWIKA EGVIMVEANPPTE TrkB Α * M TrkC Y * W L T $\mathbf{Y} \mathbf{M}$ MMIID QERQA V V G RVVLA D * I S D V M * I LNG ₽a3 L G M G * K

DDR1 TDYMENGDLNQFLSAHQL SEFIDQAEIQNWITR **DDR2** ĔΡ K M WL * * M $\mathbf{Y} \mathbf{M}$ ΝI V V V G D V EU * M

ILK THWMPYGSLYNVLHEGTNFVV
S FI FATIFQII DASQWII
YL W MW LM * YLL
M V MV

Figure 3A

	Peptide <u>Akt1/Raca</u>	N-terminal	C-terminal
	95 K014D001	Myristyl - G M E Y A N G G E L F F H L S R E R V F	- NH2
	<u>ALK1</u>		
	96 K048D101	Myristyl - G T H Y H E H G S L Y D F L Q R Q T L	- NH2
	<u>Braf</u>		
	97 K003D001	Acetyl- KKKKKGGSSLYHHLHIIETKF	- NH2
	98 K003D101	Myristyl - G T Q W S E G S S L Y H H L H I I E T K F	- NH2
	<u>c-Abl</u>		
	99 K061D101	Myristyl - G T E F M T Y G N L L D Y L R E C N R Q E V	- NH2
	<u>c-Met</u>		
D	100 K073D101	Myristyl - G L P Y M K H G D L R N F I R N E T H N P	- NH2
	c-Raf		
	101 K001D101	Myristyl - G T Q W S E G S S L Y K H L H V Q E T K F	- NH2
	102 K001D001	Acetyl - S S L Y K H L H V Q E! T K F	- NH2
Βt	c-Sea		
	103 K074D101	Myristyl - G L P Y M R H G D L R H F I R A Q E R S P	- NH2
	c-Src		
en.	104 K051D101	Myristyl - G T E Y M S K G S L L D F L K G E T G K Y L	- NH2
1	105 K051D001	Acetyl - G S L L D! L K G E! T G K F L	- NH2
	CDK2		
	106 K049D101	Myristyl - G F E F L H Q D L K K F M D A S A L T G I	- NH2
	107 K049D001	Acetyl - D! L K K F M D! A S A L T G M	- NH2
	CDK4		
	108 K050D001	Acetyl - D! L R T Y L D! K A P P P G L	- NH2
	109 K050D101	Myristyl - G F E H V D Q D L R T Y L D K A P P P G L	- NH2
	CDK6		
	110 K089D101	Myristyl - G F E H V D Q D L T T Y L D K V P E P G V	- NH2
	<u>Chk1</u>	•	·
	111 K088D102	Myristyl-GEYSSGGELFDRIEPDIGM	- NH2
	112 K088D101	Myristyl-GEYASGGELFDRIEPDIGM	- NH2
	CK IIa		
	113 K022D001	Acetyl- KKKKGGNNTDFKQLYQTL	- NH2
	114 K022D101	Myristyl - G F E H V N N T D F K Q L Y Q T L	- NH2



Figure 3B

		<u>Csk</u>																										
	115	K058D101	Myristyl -	G	T	E	Y	M	Α	K	G	S	L	v	D	Y	L	R	S	R	G	R	S	V	/ I	L		- NH2
	116	K058D001	Acetyl -	G	S	L	V	D!	L	R	S	R	G	R	S	v	L											- NH2
		<u>Fak</u>																										
	117	K060D101	Myristyl -	G	M	E	L	S	T	L	G	E	L	R	S	F	L	Q	V	R	K	Y	S	I				- NH2
		FGFR-3																										
	118	K071D101	Myristyl -	G	G	N	L	R	E	F	L	R	A	R	R	P	P	G	L	E								- NH2
	119	K071D001	Acetyl -	G	N	L	R	E!	F	L	R	A	R	R	P	P	G	L	E!									- NH2
	120	K071D102	Myristyl -	G	V	E	Y	Α	A	K	G	N	L	R	E.	F	L	R	A	R	R	P	P	• (3]	L	E	- NH2
E .	121	K071D901	Stearyl -	G	S	F	D	T	S	K	P	P	Ε	E	Q	L												- NH2
		Flk1																										
	122	K068D101	Myristyl -	G	V	E	F	S	K	F	G	N	L	S	N	F	L	R	A	K	R	N	L	. I	7	V	P	- NH2
	123	K068D101	Myristyl -	G	G	N	L	S	N	F	L	R	A	K	R	N	L	F	V	P								- NH2
M	124	K068D001	Acetyl -	G	N	L	S	N	F	L	R	Α	K	R	N	L	F	V	P									- NH2
i.	125	K068D901	Stearyl -	G	R	F	R	Q	G	K	D	Y	V	G	E	L												- NH2
≓:		GSK3b													•											•	·	
12	126	K018D003	Acetyl -	K	K	K	K	K	K	G	G	G	V	A	R	Н	Y	S	R	A	K	Q	T	7 1	L	P		- NH2
	127	K018D002	Acetyl -	V	A	R	H	Y	S	R	A	K	Q	T	L	P												- NH2
	128	K018D101	Myristyl -	G	Ď	Y	V	P	E	T	V	Y	R	V	A	R	H	Y	S	R	. A	K	. (ξ.	Γ	L	.3	- NH2
	129	K018D001	Acetyl -	R	V	A	R	Н	Y	S	R	A	K	Q	T													- NH2
		<u>Hck</u>									•																	
	130	K056D101	Myristyl -	G	T	E	F	M	A	K	G	S	L	L	D	F	L	K	S	D	E	G	S	5]	K	Q		- NH2
		<u>Iak1</u>																										
	131	K087D101	Myristyl -	G	L	E	Y	A	P	L	G	T	V	Y	R	E	L	Q	K	L	S	K	F	?				- NH2
		<u>IKK-1</u>																•	•									
	132	K090D101	Myristyl -	, G	M	E	Y	S	S	G	G	D	L	R	K	L	L	N	K	P	E	N	1 8	3 3	S	G	L	- NH2
		IKK-2																										,
	133	K091D101	Myristyl -	G	M	E	Y	S	Q	G	G	D	L	R	K	Y	L	N	Q	F	E	N	1 5	3	S	G	L	- NH2
		<u>ILK</u>		•									•															
	134	K107D101	Myristyl -	G	T	H	W	M	P	Y	G	S	L	Y	N	V	L	H	Ε	G	T	, J	1 F	7	V	V		- NH2
	135	K107D901	Stearyl -	G	Y	N	V	L	Н	E	G	T	N	F	V	V												- NH2

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Figure 3C

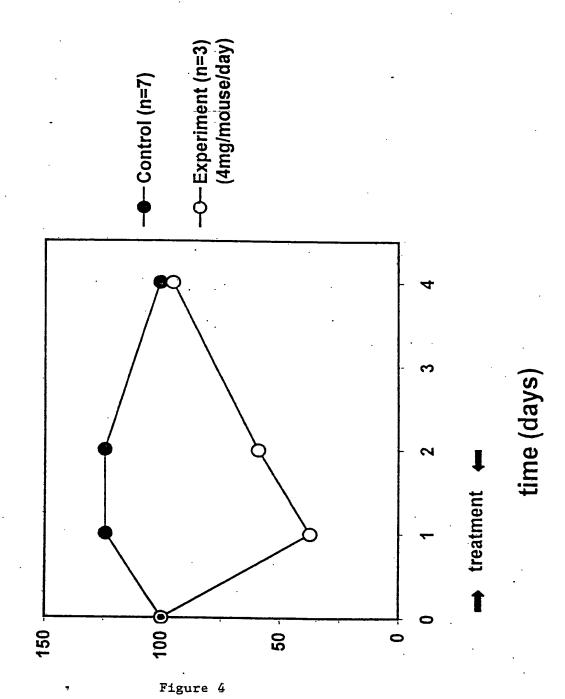
		<u>IRK</u>																										
	136	K094D101	Myristyl -	G	M	Ε	L	M	A	H	G	D	L	K.	S	Y	L	R	S	L	R	P						- NH2
	137	K094D001	Acetyl -	Α	Q	N	N	P	G	R	P	P	P	T	L													- NH2
	138	K094D102	Myristyl -	G	L	K	s	Y	L	R	S	L	R	P	E	Α												- NH2
	139	K094D103	Myristyl -	G	A	E	N	N	P	G	R	P	P	P	T	L												- NH2
	140	K094D104	Myristyl -	G	L	R	P	E	Α	E	N	N	P	G	R	P	P	P	T	L						ь.		- NH2
		Jak1																										
	141	K084D101	Myristyl -	G	M	E	F	L	P	S	G	S	L	K	E	Y	L	P	K	N	K	N	K	I				- NH2
	142	K084D102	Myristyl -	G	L	K	E	Y	L	P	K	N	K	N	K	I												- NH2
£,		Jak2																										
	143	K085D102	Myristyl -	G	L	R	D	Y	L	Q	K	H	K	E	R	I												- NH2
Ü		K085D105	Stearyl -	G	L	R	D	Y	L	Q	K	H	K	E														- NH2
		Jak3																										
m	145	K086D101	Myristyl -	G	M	E	Y	L	P	S	G	S	L	R	D	F	L	Q	R	H	R	A	Ļ					- NH2
W.	146	K086D102	Myristyl -	G	M	E	Y	L	P	S	G	S	L	R	D	F	L	Q	R	H	R	A	R	L				- NH2
£ t	147	K086D103	Myristyl -	G	L	R	D	F	L	Q	R	H	R	Α	R	L												- NH2
		<u>Lck</u>	•																									
1	148	K057D001	Acetyl -	G	S	L	V	D!	L	K	T	P	S	G	I	K	L											- NH2
Q F	149	K057D101	Myristyl -	G	T	E	Y	M	E	N	G	S	·L	V	D	F	L	K	T	P	S	G	I	K	L	:.	,	- NH2
Ľ		<u>Lyn</u>																										
,	150	K055D101	Myristyl -	G	T	E	Y	M	A	K	G	S	L	L	D	F	L	·K	S	D	E	G	G	K	. V			- NH2
		MARK1																										
	151	K045D101	Myristyl -	G	M	E	Y	A	S	G	G	Ε	V	F	D	Y	L	V	A	H	G	R	M	[- NH2
		PDGFR-b																										
	152	K064D001	Acetyl -	G	D!	L	V	D!	Y	L	H	R	N	K	H	T	F	L										- NH2
	153	K064D101	Myristyl -	G	T	Ė	Y	S	R	Y	G	D	L	V	D	Y	L	Н	R	N	K	Н	T	F	L			- NH2
		<u>PKCb</u>																										
	154	K008D101	Myristyl -	G	M	E	Y	V	N	G	G	D	L	M	Y	H	I	Q	Q	V	G	R	F					- NH2
	155	K008D001	Acetyl -	K	K	K	K	K	K	G	G	D	L	M	Y	H	I	Q	Q	V	G	R	F			• .		- NH2
	•	<u>Plk</u>	•																									
	156	K035D001	Acetyl -	R	S	L	L	E!	L	·H	K	R	R	K	A													- NH2
	157	K035D101	Myristyl -	G	R	S	L	L	E!	L	H	K	R	R	K	Α												- NH2

Figure 3D

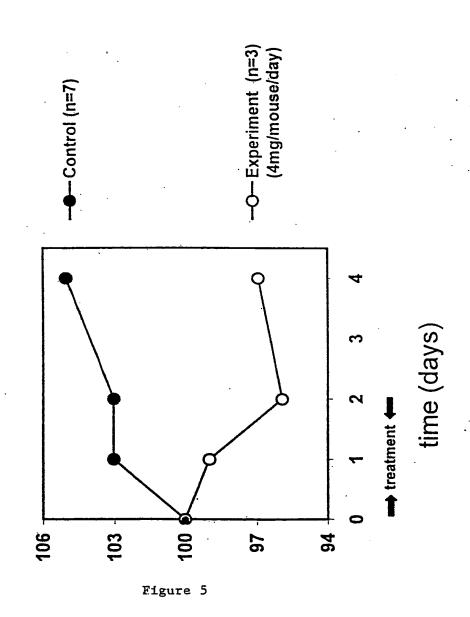
158 K035D102	Myristyl -	G	L	E	L	s	R	R	R	S	L	L	E	L	н	K	R	R	K	Α	L					- NH2
<u>Ret</u>																										
159 K080D101	Myristyl -	G	V	E	Y	A	K	Y	G	s	L	R	G	F	L	R	E	S	R	K	V	G	P			- NH2
160 K080D001	Acetyl -	G	S	L	R	G	F	L	R	E!	S	R	K	V	G	P										- NH2
Ron	•										•															•
161 K075D101	Myristyl -	G	L	P	Y	M	С	H	G	D	L	L	Q	F	I	R	S	P	Q	R	N	P			•	- NH2
<u>snk</u>																										
162 K038D101	Myristyl -	G	L	E	Y	S	S	R	R	S	M	Α	Н	I	L	K	A	R	K	V	L					- NH2
<u>Syk</u>																										
	Myristyl -	Ģ	M	E	M	Ą	E	Ļ	Ģ	P	Ļ	Ŋ.	K	Y	L	Q	Q	N	R	H	V					- NH2
TGFbRII																										
🛅 164 K093D101	Myristyl -	G	T	Α	F	H	A	K	G	N	L	Q	E	Y	L	T	R	H	V	I						- NH2
TrkB																										
165 K102D101	Myristyl -	G	F	E	Y	M	K	H	G	D	L	N	K	F	L	R	A	Η	G	P	D	Ä	V J	L M	Α	- NH2
166 K102D106	Myristyl -	G	L	R	A	H	G	P	D	A	V	L	M	Α												- NH2
167 K102D107	Myristyl -	G	L	R	A	H	G	P	D	A	v	L														- NH2
168 K102D108	Myristyl -	G	L	N	F	K	L	R	A	Н	G	P	D	Α												- NH2
169 K102D109	Myristyl -	G	F	K	L	R	A	H	G	P	D	A	V	L												- NH2
Zap70																										
170 K083D101	Myristyl -	G	M	E	M	A	G	G	G	P	L	H	K	F	Ĺ	V	G	K	R	Ε	E	I				- NH2

K:\RWAGNER\CMCC\679\FIGURES

% change in daily food consumption (g/mouse/d)



% change in body weight



MODULATION OF TH1/TH2 DIFFERENTIATION BY A JAK-DERIVED PEPTIDE

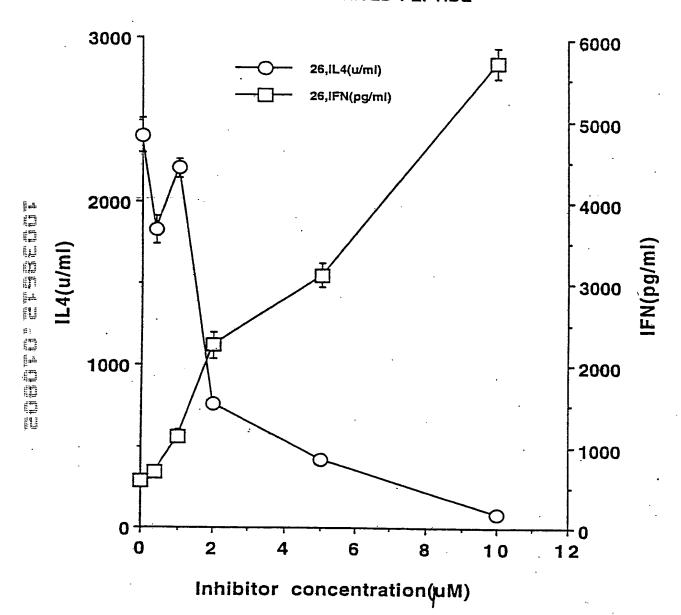


Figure 6

Fig.